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Title: Which CRAN Packages Pharma Can Actually Rely On

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Abstract

CRAN is full of useful R packages, but only a fraction of them are suitable for clinical and regulated work. Statistical programmers and data scientists in pharma often rely on the same small group of well known packages, yet many others could be used safely if teams knew what to look for. This talk shares an analysis of CRAN packages through a pharma lens and highlights the features that make a package appropriate for clinical use.

The session walks through practical signals of suitability: clear maintenance patterns, consistent releases, active issue tracking, readable documentation, stable dependencies, and evidence of testing. These indicators may sound simple, but they quickly separate packages that can support clinical pipelines from those that introduce avoidable risk.

To support this review, we use tools such as Diffify and Litmusverse to surface version changes and package health indicators, but the focus remains on the packages themselves. Real examples from CRAN will be shared to show how these signals appear in practice, including cases where popular packages are reliable long term and cases where subtle gaps become more visible once examined closely.

The talk ends with a straightforward checklist that teams can apply when deciding whether a package is fit for pharma use. The goal is to give programmers and data scientists a clear, practical way to judge CRAN packages rather than relying on habit or guesswork.